AMBITIOUS

ACADEMY LAHORE

INTERMEDIATE PART-II
COMPUTER SCIENCE
HOME BASED WORK SHEETS

FOR REGULAR STUDENTS

By

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(HOD, COMPUTER)

AMBITIOUS........A Place to DREAM BIG

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HOME BASED WORK SHEETS (NEW PAIRING SCHEME)

MULTIPLE CHOICE QUESTIONS

UNIT#01+02

1. Storage and retrieval of data is related to:

A	Data Capturing	B	Data manipulation	C	Managing output	D	Analysis Result

2. A collection of related data field is called:

A	File	B	Database	C	Attributes	D	Record

3. A logical grouping of Character is:

A	Field	B	Record	C	File	D	Data Base

4. A text file data is stored in:

A	ASCII-Code	B	Binary Code	C	Octal Code	D	Text Code

5. Data can be recovered in case of loss by using:

A	Master File	B	Transaction File	C	Backup File	D	Data File

6. A database is an organized collection of data:

A	Physically	B	Loosely	C	Random	D	Logically

7. A request for information from database terminology is called:

A	Report	B	Letter	C	Table	D	Querry

8. The extension of image file is:

A	.exl	B	.doc	C	.bmp	D	.ppt

9. Which of the following is known as data set?

A	Record	B	Field	C	File	D	Module

10. Data inconsistency is caused by:

A	Organized data	B	Integrated data	C	Independent data	D	Redundant data

11. The category of data that describes an entity is called:

A	Attribute	B	Data item	C	Record	D	Tuple

12. A table must have a:

A	Primary key	B	Secondary key	C	Composite key	D	Sort Key

13. Which of the following can be a primary key?

A	Last name	B	Salary	C	Customer ID	D	Region

14. Which of the following is not included in the definition of entity?

A	Person	B	Object	C	Concept	D	Action

15. The column of a table correspond to:

A	Table	B	Record	C	Field	D	Cell

UNIT#03+04

1. Which of the following is not included in the definition of entity?

A	person	B	Object	C	Concept	D	Action

2. The degree of relation refers to the number of:

A	Rows	B	Tables	C	Data	D	Columns

3. in ERD model, the relationship b/w two entities are represented by:

A	Rectangle	B	Oval	C	Square	D	Diamond

4. Color of car is an example of:

A	Entity	B	Attributes	C	Relation	D	Concept

5. Merging the relation is also known as:

A	View integration	B	View entities	C	View tables	D	View relations

6. In relational database, a table is also called:

A	Tuple	B	Relation	C	File	D	Schema

7. Every relation must have……key?

A	Candidate	B	Foreign	C	Primary	D	All

8. A row of relation is called:

A	Attribute	B	Entity	C	Tuple	D	Relation

9. Transitive dependency is removed in:

A	1st normal form	B	2nd normal form	C	3rd normal form	D	4th normal form

10. The goal of normalization is to:

A	Increase	B	Decrease	C	Get stable	D	Increase Anomalies

11. In 2NF, which form of dependency is removed:

A	Functional	B	Partial	C	Associative	D	Transitive

12. Which of the following is one-to-many relations?

A	Student-Reg No.	B	Mother-Daughter	C	Person-Date of Birth	D	Country-Capital

13. A person's name, birthday and social security number are examples of:

A	Attributes	B	Entities	C	Relationships	D	Descriptors

14. A relation that contains minimal redundancy and allows easy use called:

A	Clean	B	Simple	C	Complex	D	Well-Structured

15. Data inconsistency is caused by:

A	Organized data	B	Integrated data	C	Independent data	D	Redundant data

UNIT#05+06

1. Which shortcut key is used to open an existing file in MS-Access?

A	CTRL+N	B	CTRL+P	C	CTRL+O	D	CTYRL+ Z

2. A report may be based on:

A	Table	B	Relationship	C	Form	D	Attribute

3. Which object is used to store data in database?

A	Macro	B	Table	C	Form	D	Report

4. Which of the following is not a database object:

A	Table	B	Query	C	Form	D	MS-Word

5. In, MS Access, Table contains:

A	Fields	B	Records	C	Character	D	File

6. A database consists of various components called:

A	Tools	B	Properties	C	Entities	D	Objects

7. The degree of relation refers to the number of:

A	Rows	B	Tables	C	Fields	D	Columns

8. Each set of related items in a table is called:

A	Table	B	Record	C	Field	D	Query

9. Which data type is default type in access:

A	Memo	B	Number	C	Text	D	Auto number

10. Create command is used to create:

A	Table	B	View	C	Report	D	Query

11. Which wildcard replaces one character only?

A	*	B	?	C	:	D	!

12. Which field type can be indexed?

A	memo	B	Number	C	Hyperlink	D	DLE

13. To find four character names that starts with H, the criteria is specified as:

A	H * a	B	H ? 4	C	H ? ? ?	D	H # #

14. The graphically query tool is known as:

A	Query grid	B	Design grid	C	Query form	D	View form

15. How many query views are available in MS-Access?

A	2	B	3	C	4	D	5

UNIT#07+08

1. C language was developed in

A	1962	B	1969	C	1970	D	1972

2. C-Language programs are divided into units called:

A	Section	B	Syntax	C	Function	D	Debug

3. Which of the following is used to denote pre-processor directives?

A	%	B	$	C	#	D	@

4. Which of the following key is used to save as file:

A	F2	B	F3	C	F5	D	F9

5. The name header file is written between:

A	[]	B	()	C	<>	D	{>

6. Header file in C contains:

A	Compiler command	B	Library functions	C	Header	D	Operators

7. A program syntax error is detected by:

A	Linker	B	Compiler	C	Loader	D	Debugger

8. An IDE consists of:

A	Text editor	B	Compiler	C	Debugger	D	All of these

9. The extension of header file is:

A	.c	B	.txt	C	.hf	D	.h

10. The output of the compiler is:

A	Library code	B	Linked code	C	Object code	D	Source code

11. How many form layouts are available in MS-Access?

A	2	B	3	C	4	D	5

12. A report may be based on:

A	Table	B	Relationship	C	Form	D	Attributes

13. How many Reports layout are:

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A	2	B	3	C	4	D	5

UNIT#09+10

1. Variables and constants name cannot contain a(an):

A	Letter	B	Underscore	C	Period	D	Number

2. Which is numeric data type:

A	Floating point	B	Integer	C	Both A and B	D	None of these

3. Total number of keywords in C is:

A	30	B	32	C	34	D	36

4. The number of bytes used by int type in C is:

A	2	B	4	C	6	D	8

5. The only binary operator in the following is:

A	?	B	++	C	M	D	+

6. a + = b is equivalent to:

A	b + = a	B	a = + b	C	a = a+b	D	b=b+a

7. The value of logical operator OR will be 1 if:

A	A=0 & B=1	B	A=1 & B=0	C	A=1 & B=1	D	All of these

8. int is .... in C.

A	Special word	B	Key word	C	Cut word	D	First word

9. The number of bytes an un-signed integer data type cosumes is:

A	1	B	2	C	4	D	8

10. The left side of an assignment statement holds:

A	variables	B	constant	C	Expression	D	Digit

11. Which escape sequence is used to begin new line

A	\a	B	\b	C	\m	D	\n

12. Printf() is a:

A	keyword	B	Built in function	C	Local function	D	User defined function

13. The ASCII code for escape key:

A	27	B	28	C	29	D	30

14. the function getch ( ) is defined as:

A	Stdio.h	B	Conio.h	C	String.h	D	Math.h

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UNIT#11+12

1. Which programming structure executes program statements in order?

A	Relation	B	Decision	C	Sequence	D	Repetition

2. Another term for computer making a decision is:

A	Sequential	B	Selection	C	Repetition	D	Iteration

3. If a relational expression is true, it has a value:

A	0	B	1	C	-1	D	None

4. In If-Statement, false is represented by:

A	0	B	1	C	2	D	3

5. The conditional operator is used as alternate to:

A	if	B	If-else	C	If-else if-else	D	Switch

6. Graphical representation of a program is called:

A	Logic chart	B	Binary Chart	C	Flow chart	D	E-R Chart

7. Conditional operator takes:

A	One operand	B	Two operand	C	Three operand	D	Four operand

8. Which operator in C is Called Ternary operator?

A	If	B	++	C	?	D	()

9. The expression 0% 4 has a value equal to:

A	0	B	1	C	2	D	4

10. How many basic selection statements are in C?

A	1	B	2	C	3	D	4

11. How many types of loop structures are present

A	1	B	2	C	3	D	4

12. One execution of loop is known as a (n):

A	Test	B	Iteration	C	Duration	D	Integer

13. Which of the following loop is called counter loop?

A	For	B	While	C	Do-While	D	None

14. What is the final value of x after executing the code for (int x=0; x<10; x + +)?

A	8	B	9	C	10	D	11

15. A loop within a loop is called:

A	Complex	B	Nested	C	Infinite	D	For

UNIT#13+14

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1. Another name of built-in function is:

A	Library function	B	Arithmetic function	C	User defined function	D	All of these

2. The first line of user defined function is:

A	Arguments	B	Header	C	Prototype	D	Calling

3. In C-Language, first line of function definition is known as:

A	Function header	B	Function body	C	Arguments	D	Parameters

4. The scope of variable refers to:

A	Length	B	Name	C	Accessibility	D	Data Type

5. Memory allocated to a local variable at the time of its:

A	Declaration	B	Destruction	C	Definition	D	First reference

6. A function can return........... Values:

A	1	B	2	C	3	D	4

7. Global variables are created in:

A	RAM	B	ROM	C	Hard Disk	D	Cache

8. The Character conversion may occur in:

A	Text stream	B	Binary Stream	C	Input Stream	D	Output Stream

9. A file is stored in:

A	RAM	B	ROM	C	Hard Disk	D	Cache

10. fOpen() function takes.......parameters.

A	1	B	2	C	3	D	4

11. A ...... can store text only.

A	Binary file	B	Text file	C	exe file	D	Object file

12. In..... file opening mode, data can only be read from an existing file:

A	w	B	w+	C	r+	D	r

13. On successful closing a file, the fclose () returns:

A	Null	B	Zero	C	One	D	File pointer

14. A binary stream is a sequence of:

A	Bits	B	Bytes	C	kilobytes	D	Giga Bytes

15. Functions that are the part of language are called:

A	Intrinsic	B	Built in function	C	Language defined	D	All

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SHORT QUESTIONS

UNIT#01+02

1.	Define Data and information.	2.	Define data integrity.
3.	Define data capturing and data manipulation.	4.	State the purpose of query language.
5.	Define data set and data dictionary.	6.	Identify name of entity and primary key in the following: **STUDENT (student ID, St name, Group)**
7.	Define Network model.	8.	List three examples of DBMS.
9.	What is Record and field?	10.	What is the purpose of backup and recovery?
11.	Define program.	12.	Why do people use data base?
13.	What is direct access file and sequential file?	14.	List down any two features of DBMS.
15.	Define End User.	16.	Why are keys defined in table?
17.	Differentiate b/w Database and Table.	18.	Distinguish b/w an entity class and entity instance.

UNIT#03+04

1.	Define entity integrity.	2.	Define mutual exclusiveness of data.
3.	How is entity integrity maintained?	4.	When is a relation in 3NF?
5.	Define referential integrity.	6.	State the purpose of cardinality.
7.	What is Normalization?	8.	Write any two criterias to select file organization.
9.	Define function dependency with examples.	10.	Why feasibility study is used?
11.	Define synonym.	12.	Define analysis.
13.	Write difference b/w full functional dependency and transitive dependency.	14.	What is the importance of project planning?
15.	What are database Anomalies? List their names.	16.	List three uses of logic flow diagram.
17.	Define repeating group.	18.	What is the concept of data distribution strategy?

UNIT#05+06

1.	Differentiate b/w degree of relation and Cardinality of relation.	2.	Name four database objects in MS-Access.
3.	Define integrated development environment. Discuss two disadvantages.	4.	Discuss role of query in database.
5.	Write Advantages of IDE.	6.	How query is written?

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7.	List four advantages of query.	8.	Define form. List its two uses.
9.	State use of wildcards.	10.	Write definition of reports.
11.	What is referential integrity?	12.	List any two uses of reports.
13.	List two advantages of MS-Access.	14.	Define database.
15.	Define the term RDBMS.	16.	What is OLE object in MS-Access?
17.	What is database wizard?	18.	What is use of input mask?

UNIT#07+08

1.	What is computer program and who is programmer?	2.	What is meant by structured programming language?
3.	Write two characteristics of C-Language.	4.	Differentiate b/w pre-processor directives and header file.
5.	Write the use of Turbo C++	6.	Explain constant macro with example.
7.	What is object code?	8.	Define Delimiters.
9.	Define source code.	10.	What is statement of terminator?
11.	What is Object oriented language (OOP)?	12.	What is Debugging?
13.	What is the process of linking in C programs?	14.	Write down procedure for writing a program in C-Language.
15.	Define Form in MS-Access.	16.	Write advantages of Form.
17.	What do you know about Columnar Form?	18.	Write the use of data sheet form and reports.

UNIT#9+10

1.	What is an identifier? Give an example.	2.	Define format specifier with example.
3.	Differentiate b/w Standard and user-defined identifier.	4.	Write the syntax of Printf statement.
5.	C is a case sensitive language. What does it mean?	6.	What is the use of OR and AND logical operator?
7.	Differentiate b/w Declaring and defining a variable.	8.	What is compound assignment operator?
9.	What is the value of Y after the following code executes? Float y=3.4 +sqrt (25.0)	10.	What is garbage value?
11.	Identify error in the following lines: Integer A=2+3; Float B=5; Int C=A+B;	12.	Why does cancellation error occur?

13.	Find the output of following code:
	Main()
	{
	Printf("444\n");
	Printf("44");
	}
		14.	Differentiate b/w getch () function and getche() function.

15.	Give single print statement to print the followingmessage: No. of employees	16.	Define standard input.

	No. of officers		
17.	Trace error: Include<STDIO.H> VOID Main(); {Printf ("Pakistan"); }	18.	Why the ampersand (&) used in scanf is function?
19.	Discuss operators of C	20.	What is Scanf function?

UNIT#11+12

1.	What is Control Structure? List types.	2.	What is the use of if-else statement?
3.	Define Compound statement.	4.	What do you mean by condition?
5.	Define one way decision and draw flow chart.	6.	What is nested if statement. Write syntax.

7.	What is the output of following code?
	Int m, n:
	m=0;
	n=m;
	if (m= = n)
	printf ("AMBITIOUS");
	else
	Printf ("ACADEMY");
		8.	Trace the error from the following:
			Void main ()
			{
			Int a=2;
			If (a=1);
			Printf ("oK");
			else
			printf ("No");
			}

9.	Write a program that inputs a number from user and finds it is positive, negative or zero.	10.	Write down the syntax of ternary operator.
11.	Write a program in C that inputs a number by the user and checks whether it is even or odd.	12.	Write a program which inputs three numbers and displays smallest number.
13.	Write syntax of if-else statement.	14.	Write a program in C that inputs the number of months of the year and displays the number of days of the corresponding month using if-else-if statement.
15.	Define While loop. Make its flow chart.	16.	Differentiate b/w inner and outer loop.

17.	Write output of following program fragments:
	n=0
	While (n<=4)
	{
	Printf (" %3d % 3d\n", n, 10-n);
	n + +
	}
		18.	Why is sentinel value used in loop?

UNIT#13+14

1.	What is meant by function definition?	**2.**	What is lifetime of global variable?
3.	Write syntax of function definition.	**4.**	How long the global variable exists in memory?
5.	Define function body.	**6.**	What is return statement?
7.	Write the use of function prototype?	**8.**	Describe the purpose of file handling?
9.	Write the general form of function prototype.	**10.**	Write file opening modes.
11.	What is function call statement?	**12.**	Write the use of new line marker.

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13.	Define local variables.	14.	Define pointer.
15.	What is meant by scope of variables?	16.	How is file opened and closed in C?
17.	Define global variables.	18.	Write use of fopen function.
19.	What is function header and declaration? write their syntax.	20.	Discuss Difference b/w binary and text stream.
21.	Define stream and function.	22.	Give types of functions in C

Database

Short Question

1- **Data vs Information**
2- Field = Attribute = Column = Fact = Property
3- Tuple = Record = Instance = Occurrence = Row
4- Data file = Entity = Table = Relation
5- **Database with example**
6- **DBMS and RDBMS**
7- File and its type (Program Vs Data)
8- **Data dictionary**
9- **Data independence**
10- **Data integrity [and its types]**
11- **Data Security**
12- **View**
13- **Index**

14- File organization
15- Cardinality Vs Modality
16- Entity Vs Entity instance
17- Synonyms Vs Homonyms
18- Functional dependency
19- Determinant
20- IDE
21- Wizard
22- Degree Vs Order (cardinality)
23- Input mask
24- Wild Card
25- Macros
26- Join
27- Sub-form
28- Form elements (Combo box Vs List)
29- Query
30- Property of relation
31- SQL
32- Field properties

C Language

Short Question

1. **Introduction to C**
2. Computer program and programmer
3. **Structured Vs Non structured language**
4. **C Statement**
5. Machine Independence
6. **Header file**
7. **Preprocessor directives**
8. Delimiter
9. **Comments**
10. Conditional operators
11. **Linker Vs Loader**
12. Identifiers and its types
13. **Variable Vs Constant**
14. **Variable declaration Vs Variable definition**
15. Source Code Vs Object
16. **Lvalue Vs Rvalue**
17. Data types and its types
18. **Overflow Vs Underflow**
19. **Assignment statement**
20. Standard Input Vs Standard Output
21. **printf() Vs scanf()**

22. Format specifier
23. Escape sequence
24. **Field width**
25. **Control Structure**
26. If statement OR if-else statement
27. Nested if else statement
28. Loop Or repetition Or iterative control structure
29. **while Vs do-while loop**
30. goto statement
31. **continue Vs break statement**
32. **counter controlled Vs Sentinel Controlled**
33. Nested loop
34. Function and its types
35. **Function prototype**
36. Formal Vs Actual parameters
37. **Global variable Vs Local variable**
38. **Static variable**
39. **Stream and its types**
40. **String**
41. Array
42. **Pointer**
43. Data file Vs Program file
44. **EOF Vs Newline**

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